PATENT Atty. Docket: K35R1888

MAGNETIC READ HEAD WITH RECESSED

HARD BIAS AND CURRENT LEADS

ABSTRACT OF THE INVENTION

A read element includes a magnetoresistive sensor having a side and an upper surface that defines an edge. An underlayer overlies the side of the magnetoresistive sensor, and a hard bias layer overlies at least part of the underlayer and defines a hard bias junction with the underlayer. A lead is formed atop the hard bias layer. The hard bias junction is recessed from the edge of the magnetoresistive sensor by a predetermined recess distance, to provide stability and sensitivity to the read element.